From: jules hummon <hummon@hawaii.edu> Sent: Tuesday, October 30, 2007 3:10 PM

Shipboard ADCP Systems: Status Reports

Julia Hummon

<hummon@hawaii.edu>

UHDAS Overview

University of Hawaii ADCP data acquisition and processing software "UHDAS" has been installed on:

UHDAS Installations

- two Antarctic research vessels
- three NOAA ships
- 8 UNOLS ships
- one other vessel

A system status report status and subsampled data are emailed from these ships daily, allowing the health of the systems to be monitored. Status reports and figures from the subsampled data are updated on the web.

UHDAS daily figures and status from ships

2006 schedule			installed	updated	instruments
N.B.Palmer	figures	daily report	Oct 2004	July 2007	NB150, OS38
L.M.Gould	figures	daily report	Nov 2004	Aug 2005	NB150, OS38
Atlantis	figures	daily report	Jan 2006		OS75
Knorr	figures	daily report	April 2005	Nov 2005	NB150, (OS75)
Oceanus	figures	daily report	Jan 2006	Apr 2006	OS75
Thompson	figures	daily report	Nov 2005	Mar 2006	OS75
Wecoma	figures	daily report	April 2006	Sept 2007	WH300, OS75
Revelle	figures	daily report	Jan 2005	June 2006	NB150
Melville	figures	daily report	March 2006		NB150, OS75
Kilo Moana	figures	daily report	Aug 2003	Sept 2007	WH300, OS38
Ka`imimoana	figures	daily report	May 2006	Oct 2006	OS75
Hi`ialakai	figures	daily report	Jan 2006	Oct 2007	OS75
Ron Brown	figures	daily report	Sept 2007		OS75
Ka`imikai O Kanaloa	(no email)		July 2004	Sept 2007	(NB150)

Recent example of at-sea web site for scientists:

- Kilo Moana, 2007
- · Ron Brown, 2007

ADCP Status

In general, the ADCPs using UHDAS are doing well.

Anomalies

- Thompson requires a calibration scale factor, keep an eye on this one
- Wecoma scale factor resolved by replacing the cable
- KOK only has an NB150 and the deck unit is presently down
- NB Palmer OS38 was replaced
- Knorr OS75 is presently down; has 3-beam NB150 from the Oceanus
- Ashtechs continue to require monitoring

Recommendations

• Upgrade Ocean Surveyors to new firmware 23.16 (from 23.11)

UHDAS Status

Moving to a different linux distribution

- Ubuntu, from Mandriva
- 5 of the UHDAS installations are running under Ubuntu (7.04)
- working towards a more streamlined installation process

Documentation Improved

- better documentation for access to data
- more troubleshooting pages
- better organization

Weaning from Matlab (Python and Matplotlib)

- first stage of replacing at-sea web plots is underway
- land-based web plots are now "Matlab-Free"
- Python toolbox is evolving

Ships and scientists consulted

- interaction with techs on all ships; Examples:
 - o ashtech is down (email: "please reset your ashtech")
 - o networking change, new operator, bad serial port, general query
 - o instrument problems or replacements
- new computer/installations
- interactions with scientists; questions about
 - o processing
 - o accessing data at sea
 - o data quality

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